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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/655,944 | 09/04/2003 | Tong Xie | 10030169-1 | 7022 |

7590 01/05/2006

AGILENT TECHNOLOGIES, INC.
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EXAMINER

ALSOMIRI, ISAM A

ART UNIT

PAPER NUMBER

3662

DATE MAILED: 01/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/655,944 | Applicant(s) XIE ET AL. | |
| | Examiner Isam Alsomiri | Art Unit 3662 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooreman et al. in view of D'Aligny et al. US 20020143506A1.

Re claims 1, 9, and 19. Cooreman discloses in figure 1 an optical position-tracking system comprising; a first light beam steering device 7 for sweeping a first light beam through a first angular range to cause a reflection of said first light beam by a target back to said first light beam steering device to be directed towards a direction facilitating determination of a position of said target; and a second light beam steering device 6 for sweeping a second light beam through a second angular range to cause a reflection of said second light beam by said target back to said second light beam steering device to be directed towards a direction facilitating determination of said position of said target, wherein said position of said target is determined using a triangulation technique utilizing a first angular value of said first light beam and a second angular value of said second light beam, and wherein said first angular value and said second angular value depend on the existence of said respective reflection (see Abstract col. 2 line4 – col. 3 lines 66). Cooreman does not teach that the reflected light from the target is reflected again by the steering device toward a first direction

facilitating determination of the position of the target, wherein said first direction is substantially parallel to a first light direction from which said first light beam is received at said first light beam steering device; instead Cooreman teaches the reflected light from the target is passed through the scanning device to the detector. However, D'Aligny teaches a range finder including a scanning device 42 that receives reflection from the target to be reflected towards a first direction facilitating determination of the position of the target, wherein said first direction is substantially parallel to a first light direction from which said first light beam is received at said first light beam steering device (see figure 1). It would have been obvious to modify Cooreman's system to replace the scanning device with one like D'Aligny which reflect the incoming signal toward the detector depending the detector position the desired orientation of the components, and also for accurate measurements since the reflected signal goes through the same distance (in the scanning system) as the transmitted signal.

Re claims 2 and 10. Cooreman teaches a processing unit for determining the position of the target (see Abstract).

Re claims 3 and 11. Cooreman teaches the position of the target is an absolute position P.

Re claims 4, 14, and 21. The target 225 inherently includes a retro-reflecting surface.

Re claims 5, 15, and 22. Cooreman's system teaches detecting the target which reflects the first light beam when the first light beam is at a particular angular value, the first light beam steering device sweeps the first light beam through a limited angular

range that includes the particular angular value until the target fails to reflect the first light beam (inherently to keep the cursor in the updated position).

Re claims 6, 16, and 23. Cooreman's system teaches detecting the target which reflects the second light beam when the second light beam is at a particular angular value, the second light beam steering device sweeps the second light beam through a limited angular range that includes the particular angular value until the target fails to reflect the second light beam (inherently to keep the cursor in the updated position).

Re claims 7, 17, and 24. Cooreman teaches the first light beam steering device and the second light beam steering device are each from an electro-optic beam steering device (see Abstract col. 2 line 4 – col. 3 lines 66).

Re claims 8, 18, and 25. The optical position-tracking system as recited in Claim 1 wherein the first light beam and the second light beam are each generated by a light source from a semiconductor Laser technology-based light source (see col. 2 lines 18-20).

Re claim 12. Cooreman teaches the position enables controlling a cursor in the computer system and enables inputting data into the computer system (see Abstract).

Response to Arguments

Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isam Alsomiri whose telephone number is 571-272-6970. The examiner can normally be reached on Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Art Unit: 3662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isam Alsomiri



December 28, 2005



BERNARR E. GREGORY
PRIMARY EXAMINER
A.U. 3662